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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/694,363 | 10/23/2000 | Ronald P. Marcotte | 1503-003 | 9983 |

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EXAMINER

MARTIR, LILYBETT

ART UNIT

PAPER NUMBER

2855

DATE MAILED: 12/06/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/694,363

Applicant(s)

MARCOTTE ET AL.

Examiner

Lilybett Martir

Art Unit

2855

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: in Page 13 on lines 10-11 and 13 number 17 is used to define the mating detail and the hub, two different elements that compose the claimed invention.

Appropriate correction is required.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 64. Correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 8-12 and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by DeBush (Pat. 5,613,497). DeBush teaches the claimed invention, except for:

- A substantially hollow housing comprising a top portion as in element 1, a bottom portion as in element 2, an air inlet as in element 3 and at least one or two air outlet as in elements 10; a flow restriction as in element 19/29 disposed within said housing and in fluid communication with said air inlet,

- said flow restriction being dimensioned to create a back pressure within said housing; a vane assembly as in Figure 5 disposed within said housing, said vane assembly comprising a vane as in element 4, a post as in element 41 to which said vane is fixedly attached, and an adjustable hub as in element 213 attached to said bottom portion of said housing, wherein said adjustable hub is dimensioned to allow said post to be rotated to a predetermined position; a torsion spring as in element 5 comprising a first end as in element 51 engaged with said adjustable hub and a second end 52 engaged with said post; and an indicator as in element 6 indicating a peak flow rate of air based upon movement of said vane; wherein a user blows a stream of air into said air inlet, a first position of said stream of air passes through said inflow restriction and is vented through said at least one air outlet, a second portion of said stream of air contacts said vane and causes said vane to rotate against said torsion spring, and said indicator indicates the peak flow rate of said stream of air based upon said movement of said vane (Col. 4, lines 56-61), as in claims 1 and 8.
- A slot as in element 17 and a scale as in element 18 disposed proximate to said slot, and wherein said indicator 17 is a visual indicator movably disposed within said slot, said visual indicator being dimensioned to be moved by said vane when said vane is rotated by said stream of air to maintain a peak flow position within said slot upon cessation of said stream of air (Col. 4, lines 56-67), as in claims 2 and 9.

- The visual indicator as in element 6 being a unitary plastic indicator (Col. 2, lines 52-55) having a flexible tab for maintaining said peak flow position within said slot upon cessation of said stream of air (Col. 4, line 67), as in claims 3, 10 and 16.
- The slot as in element 17 forming an arc about an axis as in AC defined by a centerline of said post of said vane assembly, said arc subtending an angle of more than one hundred and eighty degrees as easily noted on Figure 4A, as in claims 4 and 11.
- The at least one air outlet comprising two air outlets as in elements 10 disposed within a flow portion of said housing, said air outlets being dimensioned to allow air to freely exit said housing, and wherein said housing further comprises a back vent as in element 12, as in claims 5, 12 and 17.
- A substantially hollow housing comprising a top portion as in element 1, a bottom portion as in element 2, an air inlet as in element 3 and at least one air outlet as in element 10; wherein said top portion of said housing comprises a slot as in element 17 and a scale as in element 18 disposed proximate said slot, a flow restriction as in element 19/29 disposed within said housing and in fluid communication with said air inlet, a vane assembly as in Figure 5 disposed within said housing, said vane assembly comprising a vane as in element 4, a post as in element 41 to which said vane is fixedly attached, and an adjustable hub as in element 213 attached to said bottom portion of said housing, a torsion spring as in element 5 comprising a first end as in element

51 engaged with said adjustable hub and a second end 52 engaged with said post; and a visual indicator as in element 6 movably disposed within said slot for indicating a peak flow rate of air based upon movement of said vane; said visual indicator being dimensioned to be moved by said vane when said vane is rotated by said stream of air and to maintain a peak flow position within said slot upon cessation of said stream of air (Col. 4, lines 56-67); wherein a user blows a stream of air into said air inlet, a first position of said stream of air passes through said inflow restriction and is vented through said at least one air outlet, a second portion of said stream of air contacts said vane and causes said vane to rotate against said torsion spring, and said indicator indicates the peak flow rate of said stream of air based upon said movement of said vane (Col. 4, lines 56-61), as in claim 15.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6,13 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeBush (Pat. 5,613,497) in view of Edwards et al. (Pat. 6,126,613). DeBush teaches the claimed invention, except for:

- An air filter assembly attached to said inlet, as in claims 6,13 and 18.

Edwards et al. teaches a flow meter having a filter as in element 146 that is removable (Col. 7, lines 8-12).

It would have been obvious at the time the invention was made to ordinary skill in the art to modify the peak flow meter of DeBush using the teachings of Edwards et al. by providing a filter that is removable for the purpose of protecting the interior of the device from saliva and particles that may enter the meter while it's being used therefore improving its reliability.

Claims 7, 14 and 19 rejected under 35 U.S.C. 103(a) as being unpatentable over DeBush (Pat. 5,613,497) in view of Edwards et al. (Pat. 6,126,613) as applied to claims 6, 13 and 18 above, and further in view of Karbachsch et al. (Pat. 5,422,057). DeBush in view of Edwards et al. teaches the claimed invention, except for:

- An hexagonal filter portion, as in claims 7, 14 and 19.

Karbachsch et al. teaches a filtration module with different shapes, including one with an hexagonal geometrical shape as in Figure 6.

It would have been obvious at the time the invention was made to ordinary skill in the art to modify the peak flow meter of DeBush using the teachings of Karbachsch et al. by providing a filter that features a substantially hexagonal filter portion for the purpose of providing a filtering medium that protects the flow meter of DeBush from external contaminants that may alter its functioning.

Citation of Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art considered pertinent during examination of the examined application is:


- Stockwell et al. (Pat. 5,253,651) Ventilatory instrument for measuring peak expiratory flow.
- Williams (Pat. 5,277,195) Portable spirometer.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lilybett Martir whose telephone number is (703)305-6900. The examiner can normally be reached on 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin Fuller can be reached on (703)308-0079. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-3432 for regular communications and (703)305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.


Lilybett Martir
Examiner
Art Unit 2855


Benjamin R. Fuller
Supervisory Patent Examiner
Technology Center 2800


November 30, 2001